We'll Bring the Ocean to You!

The Hawaiian Islands Humpback
Whale National Marine Sanctuary
promotes hands on, experience-based
learning about our marine environment
and resources. Curriculum varies from
one time topic-specific learning
activities to more in-depth activities
with follow-up field classes and marine
monitoring programs.

We can cater to your curricular needs! Our material follows DOE standards and is a fun and exciting way to introduce students to the marine environment.

All activities are FREE.

To "book" a visit or to request more in-depth class descriptions, including standards addressed, call or email Alastair Hebard (808) 879-2818.

alastair.hebard@noaa.gov



In-School Classes and Activities Offered

Auditorium Presentations and Classroom presentations

(Content Adapted for Grade Levels)

Humpback Whale Ecology and Behavior

Learn everything you need to know about humpback whales through our interactive presentations. We combine the use of props, PowerPoint, and video to give your students the most up-to-date information about Hawai'i's humpbacks.

Hawai'i's Protected Species

Students will participate in our interactive presentation on the importance of our federally protected species. Learn about the status and conservation of Hawai'i's whales, dolphins, monk seals, and sea turtles and what you can do to help.

Marine Debris and Ocean Currents



We are talking trash, and lots of it. Find out about the growing world-wide problem of marine debris.

Topics can include oceanography, currents, effects on wildlife, problem solving, analysis of debris, and more.

Classroom Outreach Presentations Grades 6-12

(1-Hour Classroom Activity)

Limu and our reefs

Have you ever noticed all the algae that washes up on shore?
Well, just in case you haven't we'll bring it up to your classroom for you to experience the smell, touch and taste of our islands' native and non native limu.

Learn about the ecological importance of limu on our reefs as well as how to sort, identify, and press the different species. Follow-up field classes available.

What is that? Learning About Our Ocean Critters.

Students will learn about the inter-tidal and reef community fish and invertebrates. We will explore some of the common critters and the ecological relationships between

them. Students will participate in critter identification games in addition to exploring reef relationships.

Exploring a Hawaiian Fish Pond

Learn about the cultural significance of fishponds in Hawai'i and how they tie into



the traditional ahupua 'a or ancient land divisions. The $K\bar{o}$ 'ie 'ie Loko I'a is located on-site, and is

being restored by hand. We get you as close as possible through the construction of clay replicas and the use of other handson games and activities.

Salinity Lab and/or Water Quality

How clean is the water that you are swimming in? Let's find out? Learn what about different water quality monitoring parameters and how to measure them. We will look at pH, temperature, salinity,

dissolved oxygen, turbidity and bacteria. Students will test and compare two different water sources.







Classroom Outreach Activities Grades K-5

(1-Hour Classroom Activities)

Big Hungry Whales

How big is a Humpback whale? Students will participate in activities that

demonstrate the size and behaviors of the humpback whale. Learn how whales feed through the making of a student-powered bubble net!



Turtle Tails

Did you know that you can tell the difference between a male and female



turtle by the length of its tail? Students will learn about the anatomy of a turtle and how to tell the difference between the different species found here as

they make their own turtle model.

Saltwater Investigation

Why is the ocean salty? Why do things float? Students will participate in a variety of activities as they investigate the properties of seawater.

Life in a Coral Reef

Many different species live in coral reefs. Students will explore how all these different organisms are



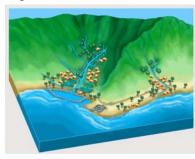
connected, special adaptations they have, and how they each play a unique role in the ecosystem as students create a coral reef model.

Lessons in Limu

Limu plays a key role in the marine ecosystem. Students will sort thru collected limu and identify it using ID guides and props. We then make bookmarks or limu cards out of pressed limu students can keep.

Understanding Fishponds

What is a *Loko I'a*? Let us bring Hawai'i's fishponds to you. Learn the basics about Hawaiian fishponds including the cultural significance and the function of the



different types. We will take you back in time in with hands on creative games and activities. The Hawaiian Islands Humpback Whale National Marine Sanctuary's Education Center is open to the public Monday through Friday from 10:00 a.m. to 3:00 p.m.

It is free!

School group sessions are scheduled by appointment. Contact Alastair Hebard or Jerry Stowell at 879-2818 or email alastair.hebard@noaa.gov to reserve your date today!



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MORE THAN WHALES!

In-School Marine Education Outreach Programs





